

## File Names

12:00 Monday, March 21, 2005 1

File #	Original File Name
1	PAC2001_SMMT_R-M_NITRATE-RADICAL_DOAS_20010816D14_V1.csv

# Dataset Key Phrases

Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Sampling Interval As Reported in Main Table	Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym	Study Or Network Name	Country Code	State Or Province Code
NARSTO 2002/05/28 (2.301)	McLaren ; Dr. Robert	Centre for Atmospheric Chemistry, York University	NO3_radical ; gas phase nitrate radical, NO3.	Variable interval	Variable interval	1	YORKU	York University	Robert McLaren, Centre for Atmospheric Chemistry, York University	PAC2001	Pacific 2001	CA (CANADA)	BC

## Dataset Key Phrases

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Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation	Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File	Companion File Name format And Version	Date This File Generated archive Version Number
Centre for Atmospheric Chemistry, York University, 4700 Keele St., Toronto M3J 1P3; 416-736-2100 x30675; rmclaren@yorku.ca	None ; None	None	Robert McLaren, Centre for Atmospheric Chemistry, York University	2002/07/29	MS Excel/2000	None ; Not applicable	2004/10/05 ; 1

Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values	Table Explanation Of Reported Uncertainty	Table User Note
Zero and negative values are present in this table, they have not been removed or modified, but have been flagged with the V1 flag, as have been all below detection limit estimates. All averaged optical spectra were analyzed for the presence of the 662.3 nm signature absorption peak of the NO3 radical, through integration, whether or not a peak was observable in the spectra or not. This results in many negative and near zero values when NO3 is below the detection limit. These values are statistically significant when looking at a large group of data points, time series of the data, etc.	Values below the detection limit, positive, zero, or negative, are reported as such and are flagged as V1	The absolute uncertainty in ppt is reported for each measurement representing 1.0 standard deviations (68% confidence interval). This uncertainty represents a propagation of errors associated with the following uncertainties: uncertainty of extracting 662.3 nm signal from absorption file through integration (multiple integrations were performed for each spectra); uncertainty in integrated cross section of 662.3 nm absorption feature, uncertainty in path length.	

Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
			Nitrate_Radical	Remote sensed profile--from surface

## Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
PC01CABCSMDO	Sumas DOAS site, temporary site with 3km path	BC	49.04639	-122.24166	.	195.1	Other	Rural	2001/08/20	2001/08/31	None		15

# NARSTO Standard Flags

Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
M1	Missing value because no value is available
	Missing value because no value is available
	Missing value because no value is available
M2	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
V0	Valid value
	Valid value
	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
	Valid estimated value
	Valid estimated value
V3	Valid interpolated value
	Valid interpolated value
	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)

## NARSTO Standard Flags

Flag: NARSTO	Description
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL



Site ID: **PC01CABCSMDO** Variable name: **Nitrogen oxide (NO3)** Common Name: **Nitrate radical** Units: **pptv** Sampling interval: **Variable interval**

CAS ID: **C12033-49-7** Observation type: **Gas** Field sampling or measurement principle: **DOAS** Blank Correction: **Not blank corrected**

Sampling Height above ground (m): **Variable over 3.4 km beam** Wavelength (NM): **662.30** Wavelength--lower bound (NM): **658.90**

Wavelength--upper bound (NM): **667.00** Instrument name and model number: **Research Instrument** Detection Limit: **Varies--see Detection limit column**

Site Name: **Sumas DOAS site, temporary site with 3km path, British Columbia** Latitude: **49.04639 deg.** Longitude: **-122.24166 deg.** Start Date: **2001-08-20** End Date: **2001-08-**

